REMARKS

Applicants hereby submit a Request for Continued Examination (RCE), under 37 C.F.R. §1.114 for the above-referenced prior-filed non-provisional application and this Amendment B responsive to the Office Action—Date Mailed: February 5, 2008, Paper No. 20080201; for which a response is due [3] three months from the date of mailing of the Office Action: May 5, 2008; is hereby extended [3] three months by petition and payment of fee therefor by charge to Sitrick & Sitrick's Deposit Account Number: 501166 via the Request for Continued Examination (RCE) Transmittal.

Claims 1-14, 16, 17, 21-40, 43-96 and 99-104 were rejected by Examiner in the afore-mentioned Office Action to which this Amendment B and Request for Continued Examination is responsive. Claims 1-14, 16, 17, 21-40, 43-96 and 99-104 are hereby currently pending. Claims 44, 78, and 86-95 are original. Claims 1, 2, 3, 5, 7, 14, 21, 22, 37-39, 45, 46, 52, 54, 55, 56, 64, 66, 67, and 96 are hereby currently amended. Claims 4, 6, 8-13, 16, 17, 23-36, 40, 43, 47-51, 53, 57-63, 65, 68-75, 79-85 and 99-104 were previously presented. Claims 105-109 are hereby added as new claims. Claims 15, 18-20, 41, 42, 97 and 98 were previously cancelled. No new matter has been added. Reconsideration is respectfully requested. By Amendment A as previously filed, eight (8) claims were cancelled and two (2) new claims were added. By this Amendment B, five (5) new claims have been added. Thus, no additional fee for the added claims is due herewith.

Examiner states: "The rejection of **Claims 1-55, 69, and 96-102** under 35 USC 101 is withdrawn in view of amendments filed 11/7/2007."

Examiner states:

> **Claims 56-68 and 70-95** are rejected under 35 U.S.C. 101 because the claims are directed to non-statutory subject matter, as they do not fall under any of the statutory classes of inventions. The language in the claims raise an issue because the claims are directed merely to an abstract idea that is not tied to an article of manufacture which would result in a practical application producing a concrete, useful, and tangible result to form the basis of statutory subject matter under 35 U.S.C. 101.

> The claims could reasonably be drawn to functional descriptive material, per se, i.e., 'program' may be taken to mean software alone, and as such, the claims would be directed to non-statutory subject matter.
>
> The claims lack the necessary physical articles or objects to constitute a machine or a manufacture within the mean of 35 USC 101.

Claims 56-58 and 70-95, as per pending this amendment, have been amended so as to clearly be directed to patentable statutory subject matter. Independent Claim 56, as amended, recites a computer system and operations providing remote authentication on a first computing subsystem of processing of content at a remote computing subsystem. Independent Claim 64 has been amended to recite a source of concurrent execution for a first computing subsystem in conjunction with a media server. Thus, all pending Claims 56-68 and 70-95 are directed to statutory subject matter, and the rejection of Claims 56-68 and 70-95 under 35 U.S.C. 101 is hereby traversed and overcome.

Examiner states:

> 1. **Claims 2, 3** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
>
> - Considering **Claim 2**, it is unclear the differences between limitation '(a) stopping the sending of the streaming data packets' and limitation '(b) stopping the forwarding of the streaming data packets'. For the purposes of examination and following the language presented in the claims. Only one of the limitations will be examined. Further clarification or the removal of (a) or (b) is required.
> - Considering **Claim 3**- line 1, recited the limitation 'the rules of processing.' There is insufficient antecedent basis for this limitation in the claim.

Claim 2 has been amended to remove subparagraph "(b)" and to retain the broader paragraph "(a)" therein.

Claim 3 has been amended "wherein the operational software module provides rules of processing that are defined by at least one of:" to clarify that the "operational software module provides rules of processing...".

Thus, by this Amendment B, the rejection of Claims 2 and 3, under 35 U.S.C. 112, second paragraph is hereby traversed and overcome.

Examiner states: "1. **Claims 1-5,7-14, 16, 17, 21, 23-40, 43-64, 66-96, 99-104** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Agrawal et al. (US 2002/0124169)**, hereafter 'Agrawal', in view of **Andrews (US 6,574,736)**, hereafter 'Andrews'."

It is respectfully submitted that Examiner's reliance upon Agrawal and Andrews is without technical merit and is incorrect; with or without the combination of Capitant or Drake. None of the references of record, alone or in combination, teach, suggest or infer the claimed invention as set forth in the currently pending claims of a first computing subsystem executing to assure that the operational software in another computing subsystem was actually executed or was executed concurrently with software that generated security tags on another computing subsystem or allowing remote validation on a second computer of concurrent execution of operation code of the first computing subsystem.

The pending claims as per this Amendment are patentably distinguishable as stated hereinabove, as clearly shown by reference to the independent claims as examples thereof.

For example, presently pending claim 1, provides protection "wherein the second computing subsystem provides means for (...) validating as a successful validation that the operational software module was unchanged when utilized in generating the security tags at the first computing subsystem", to wit:

> "wherein the first computing subsystem provides means for:
>
> (a) receiving of the streaming data packets containing digital media from the second computing subsystem,
>
> (b) utilizing an operational software module by the first computing subsystem for processing of the streaming data packets containing digital media, and
>
> (c) utilizing the operational software module by the first computing subsystem for generating security tags responsive to said processing of streaming data packets and sending the security tags to the second subsystem; and
>
> wherein the second computing subsystem provides means for:

(a) receiving the security tags from the first computing subsystem, and

(b) providing processing logic for validating as a successful validation that the operational software module was unchanged when utilized in generating the security tags at the first computing subsystem, and otherwise determining a failed validation if the operational software module was changed when utilized in generating the security tags at the first computing subsystem." (Claim 1, as amended).

As another example, presently pending claim 37, provides for "on the first computing subsystem generating security tags responsive to an associated tag generation module concurrently executing with the operational software module; (...) processing the security tags in the second computing subsystem to determine successful validation responsive to validating that the processing of the data in the first computing subsystem was processed by the operational software module operating concurrently with the generating the security tags by the associated tag generation", to wit:

"processing the data on the first computing subsystem responsive to an operational software module, and generating security tags responsive to an associated tag generation module concurrently executing with the operational software module;

concurrently executing the associated tag generation module responsive only to executing the respective operational software module in the first computing subsystem;

sending the security tags to the second computing subsystem from the first computing subsystem;

processing the security tags in the second computing subsystem to determine successful validation responsive to validating that the processing of the data in the first computing subsystem was processed by the operational software module operating concurrently with the generating the security tags by the associated tag generation, and otherwise determining a failed validation; and

adjusting communication of sending of the data responsive to one of the successful validation and the failed validation." (Claim 37, as amended).

As another example, presently pending claim 52, provides for "processing the security tags in the second computing subsystem to determine successful validation responsive to validating that the processing of the data in the first computing subsystem was processed by the operational software module operating concurrently with the generating the security tags by the associated tag generation", to wit:

"processing of the streaming data packets in the first computing subsystem according to defined rules for processing;

generating security tags responsive to execution of the defined rules for processing;

sending the security tags from the first computing subsystem to a second computing subsystem;

providing security tag validation logic in the second computing subsystem;

processing, in the second computing subsystem, the received security tags, responsive to the security tag validation logic to provide respective validated security tags; and

processing in the second computing subsystem the validated security tags and the received security tags to determine whether the generating security tags in the first computing subsystem was properly generated responsive to execution of the defined rules for processing at the first computing subsystem so as to validate that the defined rules of processing were unchanged at the time of execution at the first computing subsystem." (Claim 52, as amended).

As another example, presently pending claim 54, provides for "generating security tags at the first computing subsystem responsive to the streaming data packets and responsive to the rules of processing; (...) and processing the received security tags in the second computing subsystem to validate that the operation software was unchanged when the operation software performed the processing in the first computing subsystem when operating according to the rules of processing", to wit:

"transmitting data packets from a second computing subsystem to a first computing subsystem;

providing operation software that provides for defining rules of processing for execution on the first computer subsystem;

generating security tags at the first computing subsystem responsive to the streaming data packets and responsive to the rules of processing;

sending respective ones of the security tags from the first computing subsystem to the second computing subsystem; and

processing the received security tags in the second computing subsystem to validate that the operation software was unchanged when the operation software performed the processing in the first computing subsystem when operating according to the rules of processing." (Claim 54, as amended).

As another example, presently pending claim 56, provides for "a tag generator at the remote computing subsystem (...) to locally generate a sequence of security tags responsive to concurrent execution of an operational code module utilizing a sequence of content processing steps; (...)a tag verifier at the first computing subsystem (...)to authenticate that the operation code module was unchanged during the execution at the remote computing subsystem for assuring integrity of the sequence of content processing steps", to wit:

"a tag generator at the remote computing subsystem operating from an initial generator state to locally generate a sequence of security tags responsive to concurrent execution of an operational code module utilizing a sequence of content processing steps;

means providing for transmission from the remote computing subsystem to the first computing subsystem of the sequence of security tags;

a tag verifier at the first computing subsystem, operating from an initial verification state to generate a sequence of comparison security tags for selective comparison to the sequence of the security tags; and

means for coordinating the initial generator state and the initial verifier state prior to the execution of the operational code module,

wherein the tag verifier selectively provides valid comparison tags responsive to the means for coordinating, wherein the valid comparison tags are utilized to authenticate that the operation code module was unchanged during the execution at the remote

computing subsystem for assuring integrity of the sequence of content processing steps." (Claim 56, as amended).

As another example, presently pending claim 64, provides for "interlocking of the plurality of software logic modules, comprised at least of a first separate operational module and a second separate operational module, into a single logic program that provides a combined functionality; (...)wherein the combined functionality provides for the first computing subsystem providing the subtask functions of (a) receiving of streaming data packets from a media server (...), and (b) generation of security tags responsive to the second separate operational module within the single logic program and selectively sending of the security tags to said media server (...)wherein the combined functionality assures that the first separate operational software module for receiving of data packets executes concurrently with the second separate software logic module generating security tags, to wit:

"a transformation controller providing interlocking of the plurality of software logic modules, comprised at least of a first separate operational module and a second separate operational module, into a single logic program that provides a combined functionality;

wherein the combined functionality is only provided by the first computing subsystem when the plurality of subtask functions are executed concurrently responsive to the single logic program;

wherein the combined functionality provides for the first computing subsystem providing the subtask functions of:

(a) receiving of streaming data packets from a media server associated with the first computing subsystem responsive to the first separate operational module within the single logic program, and providing processing of the streaming data packets responsive to defined rules for processing of the streaming data packets, and

(b) generation of security tags responsive to the second separate operational module within the single logic program and selectively sending of the security tags to said media server associated with the first computing subsystem.

wherein the combined functionality assures that the first separate operational software module for receiving of data packets executes concurrently with the second separate software logic module generating security tags." (Claim 64, as amended).

As another example, presently pending claim 96, provides for "processing of the streaming data packets on the first computing subsystem, in accordance with defined rules in the first computing subsystem; generating a security tag responsive to the processing in accordance with the defined rules in the first computing subsystem; (...) and validating the security tag on the second computing subsystem responsive to determining that the defined rules were unchanged when the security tag was generated in accordance with the processing of the streaming data packets on the first computing subsystem", to wit:

"receiving streaming data packets from a media server, at the first computing subsystem;

processing of the streaming data packets on the first computing subsystem, in accordance with defined rules in the first computing subsystem;

generating a security tag responsive to the processing in accordance with the defined rules in the first computing subsystem;

transmitting the security tag to a second computing subsystem; and

validating the security tag on the second computing subsystem responsive to determining that the defined rules were unchanged when the security tag was generated in accordance with the processing of the streaming data packets on the first computing subsystem." (Claim 96, as amended).

All of the remaining pending claims per this Amendment B, depend from one of these independent claims 1, 37, 52, 54, 56, 64 and 96.

As discussed in detail in this Amendment B, none of the cited prior art, alone or in combination with each other, teach, suggest or infer the claimed invention as set for the in the currently pending claims per this Amendment B, as illustrated by the cited claim language of the independent claims 1, 37, 52, 54, 56, 64 and 96. All of the pending

claims per this Amendment B are thus patentably distinguishable over all art of record, and all rejections of all of the pending claims per this Amendment B are traversed and overcome for the reasons as discussed within this Amendment B.

Thus the rejection of Claims 1-5,7-14, 16, 17, 21, 23-40, 43-64, 66-96, 99-104 under 35 U.S.C. 103(a) as being unpatentable over Agrawal et al. (US 2002/0124169) in view of Andrews (US 6,574,736) is hereby traversed and overcome.

Claims 6 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Agrawal** and **Andrews** in view of **Capitant (US 2003/0078891)**, hereafter 'Capitant'."

Examiner rejects **Claims 6 and 22**, based upon the combination of Agrawal and Andrews; citing: (Agrawal- [0061] lines 7-12), (Capitant- [0045] lines 5-7).

It is respectfully submitted that Examiner's reliance upon Agrawal and Andrews is without technical merit and is incorrect; with or without the combination of Capitant or Drake. As discussed in detail in this Amendment B, none of the references of record, alone or in combination, teach, suggest or infer the claimed invention as set for the in the currently pending claims of a first computing subsystem executing to assure that the operational software in another computing subsystem was actually executed or was executed concurrently with software that generated security tags or on another computing subsystem or allowing remote validation on a second computer of concurrent execution of operation code of the first computing subsystem. Thus the rejection of Claims 6 and 22 under 35 U.S.C. 103(a) as being unpatentable over Agrawal et al. (US 2002/0124169) and Andrews (US 6,574,736) in view of Capitant (US 2003/0078891) is hereby traversed and overcome.

Claim 65 is rejected under 35 U.S.C. 103(a) as being unpatentable over **Agrawal** and **Andrews** in view of **Drake (US 6,006,328)**, hereafter 'Drake'."

Examiner states: Considering **Claim 65**, the combination of Agrawal and Andrews does not explicitly disclose the single logic program is written to be immune to reverse generation." Examiner cites Drake (column 3- lines 32-37 and lines 45-49).

It is respectfully submitted that Examiner's reliance upon Agrawal and Andrews is without technical merit and is incorrect; with or without the combination of Capitant or Drake. As discussed in detail in this Amendment B, none of the references of record, alone or in

combination, teach, suggest or infer the claimed invention as set for the in the currently pending claims of a first computing subsystem executing to assure that the operational software in another computing subsystem was actually executed or was executed concurrently with software that generated security tags or on another computing subsystem or allowing remote validation on a second computer of concurrent execution of operation code of the first computing subsystem. Thus the rejection of Claims 65 under 35 U.S.C. 103(a) as being unpatentable over Agrawal et al. (US 2002/0124169) in view of Andrews (US 6,574,736) is hereby traversed and overcome.

It is respectfully submitted that Examiner improperly interprets and relies upon the cited references of art in rejecting the pending claims herein. For example, Examiner states:

> With respect to applicants argument that Agrawal teaches the use of authentication tags to validate the identity at a second node, the identity of a first node, Applicant is directed to Agrawal- Fig. 2, [0038], [0050]. Agrawal discloses a controller for processing digital communication and interacting with the user. The data communication is made of data packets. Agrawal further discloses data communication between a receiving node and a sending node wherein the source of the communication and its integrity is based on the authentication tags which are generated with each data packet.

However, as explained in this Amendment B, Examiner does not take into account that not all validations or authentications are equivalent. As a case in point, the pending claims are not directed to authenticating the identity of a first node by a second node. This citation of Agrawal as to this point is totally immaterial to the pending claims. Rather, as set forth above, the pending claims cover assuring that the operational software in another computing subsystem was actually executed or was executed concurrently with software that generated security tags or on another computing subsystem or allowing remote validation on a second computer of concurrent execution of operation code of the first computing subsystem. Thus, for the reasons as cited herein, the pending claims herein are patently distinguishable from the references cited.

Applicant has by the present Amendment, herein amended the Claims and has made remarks specifically pointing out how the claim language is patentably distinguishable over the references of record as cited.

The prior art of record uses security tags (or keys) to control access to data. Applicants' claims use security tags in a patentably distinct manner to authenticate that the software executed in generating the tags was unchanged from its original form when it was executed to generate the tags. Applicants' use of authentication is patentably distinguishable over all art of record.

The following remarks provide a few of the many examples of how Examiner improperly cites to Agrawal:

1) The term "authentication" in Agrawal and in the presently pending claims has entirely different meaning: Agrawal discloses session (and routing) authentication in the context of ad-hoc wireless sensor networks, while in the currently pending claims the authentication is of the software (program, code, etc.) as executing on a computing subsystem as providing for original/authentic processing of the content of received packets, furthermore, it is done in the context of digital right management (DRM).

2) The terms "sending", "receiving", "forwarding" etc. in Agrawal's are part of the sessions established and routing among nodes and clusters and are what the authentication methods and systems are focused on. In the currently pending claims, the terms "sending", "receiving", and "forwarding" have no relationship whatsoever with the establishment of sessions. Furthermore, the currently pending claims are not directed to the establishment of sessions. In other words, the currently pending claims do not authenticate whatsoever or otherwise have to do with the establishment of sessions among nodes. Thus, Examiner's citation to and reliance upon Agrawal to reject the presently pending claims is inapposite, incorrect, improper and without technical merit.

The following remarks provide a few of the many examples of how Examiner improperly cites to Andrews:

1) The term "logical classes of users called roles" is used in an object oriented programming environment. The roles are administrated by the system's administrator to users and group of users. As stated in Andrews' (Abstract) "At run-time a user is not permitted access to a processing device unless the user is a member of a permitted role for the processing service." One problem with Andrews and other prior art systems is that a user is able to tamper with (modify) [without any detection] the software program/code that is enforcing the users' permitted roles.

2) The currently pending claims are unrelated in any way to "roles" as in the teachings of Andrews.

3) The currently pending claims provide for preventing users from tampering (modifying) a software program/code in run-time at a first computing subsystem without being detected at a second computing subsystem. This is not part of or taught by Andrews, Agrawal or any other art of record.

Applicants respectfully submit that Applicants' invention is completely patentably distinguishable over all art of record.

As another example, Agrawal is the primary reference in each of the rejections. However, Agrawal's subject matter is entirely different than the presently pending claims.

There are fundamental patentable distinctions between Applicants' presently pending claims and the cited prior art (e.g., including but not limited to Agrawal, Andrews, etc.), and the above are only a few examples. Therefore, Applicants respectfully submit that Examiner's rejections are inappropriate and without technical merit due to the fundamental patentable distinctions between Applicants' presently pending claims and the cited prior art. Furthermore, Applicants respectfully submit that Examiner's rejections are inappropriate and without technical merit due to the patentable distinctions between the meaning of technical terminology in Applicants' presently pending claims versus the meaning of terminology in the cited art of record.

As another example of the patentable distinctions between Applicants' presently pending claims and the cited prior art, consider the concept of running of modules together as cited in the

art of record as being common in computing. This is not at all analogous to the combination of modules as interlocked as set forth in various ones of the Applicants' presently pending claims, such as for assuring that the interlocked combined operational software modules that were combined and put together are actually executed and run together and not run when separated. This is not taught, suggested nor inferred by any of the art of record nor employed in regular software practices (modular or object-oriented methods). Therefore, again, Applicants respectfully submit that Examiner's rejections are inappropriate and without basis on the technical merits due to the fundamental patentable distinctions between Applicants' presently pending claims and the cited prior art.

Nothing in the art of record cited against Applicants' presently pending claims teach, suggest, infer nor allows the remote validation of concurrent execution of any operational software module. Applicants' presently pending claims are patentably distinguishable over all art of record. For example, Applicants' presently pending claims are patentably distinguishable over the cited prior art's providing a tag or cryptographic field that is sent solely as a witness to the cryptographic module being executed remotely in producing the tag.

The presently pending claims have been amended in order to further clarify the patentable distinctions of the presently pending claims over all art of record.

The teachings, structures, methods, and operations to which Examiner cites Agrawal, Andrews, Capitant and Drake and other art of record, fail to teach, suggest nor infer the presently pending claims as per this Amendment B. It is respectfully submitted, that by this Amendment and remarks herein, all bases of rejection have been traversed and overcome.

It is respectfully submitted that Examiner's numerous citations to Agrawal, Andrews, Capitant and Drake and other art of record, do not support Examiner's rejections or arguments in support thereof, and do not teach, suggest, imply or infer Applicants' presently claimed invention as per this Amendment B.

Applicants have fully considered Examiner's rejections and all art of record, and hereby submit this Amendment B and Request for Continued Examination so as to overcome and traverse all bases of any and all objections and rejections and to place all claims and the Application in proper form for allowance.

Applicants respectfully submit that the above-referenced application, including all pending claims, is in proper form for Allowance. A Notice of Allowance or a Notice of Allowability is respectfully requested.

This response is accompanied by the appropriate Request for Continued Examination (RCE) Transmittal authorizing the Director to charge any additional fees and credit any overpayments during the pendency of this application to Sitrick & Sitrick's Deposit Account Number: 501166. A fee, in the amount of $525.00, for a Three-month Petition for Extension of Time is due and hereby paid via charge to Sitrick & Sitrick's Deposit Account Number: 501166 via the Request for Continued Examination (RCE) Transmittal. Reconsideration is respectfully requested.

The Examiner is invited to directly communicate with the undersigned, if it will in any way facilitate the prosecution of the application.

Respectfully submitted,

David H. Sitrick
Attorney for Applicant
Registration No. 29,349

August 5, 2008

SITRICK & SITRICK
8340 N. Lincoln Ave., Suite 201
Skokie, IL 60077
Telephone Number: (847) 677-4411
Facsimile Number: (847) 677-4656